

## ABSTRACT OF THE DISCLOSURE

A router for automatically generating an IP address including a position identifier portion and an interface identifier portion includes a routing table for storing each position identifier portion and information on an output route for the position identifier portion, a determining unit for determining for each of a plurality of ports whether a position identifier portion is assigned to a network to which the port is connected, a position identifier portion generating unit for referring to the routing table and generating a position identifier portion different from the position identifier portion registered in the routing table for a port not assigned a position identifier portion, and a routing unit for receiving routing information including a position identifier portion according to a dynamic routing protocol and registering the routing information in the routing table.